

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :  
Kazumi MATSUSHIGE et al. :  
Serial No. NEW : **Attn: APPLICATION BRANCH**  
Filed January 20, 2004 : Attorney Docket No. 2004-0076

METHOD OF SOLDERING LEAD-FREE  
SOLDER, AND JOINED OBJECT  
SOLDERED BY THE SOLDERING METHOD  
(Rule 1.53(b) Divisional of Serial No.  
10/009,168, Filed December 7, 2001)

THE COMMISSIONER IS AUTHORIZED  
TO CHARGE ANY DEFICIENCY IN THE  
FEE FOR THIS PAPER TO DEPOSIT  
ACCOUNT NO. 23-0975.

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicants request consideration of ☒ the references listed on attached form PTO-1449 and/or ☐ the additional information identified below in paragraph 3. A legible copy of each reference listed on the form PTO-1449 was previously cited by or submitted to the Patent Office in prior parent application Serial No. 10/009,168.

1a. ☒ This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, **or**

before the mailing of a first Office Action on the merits or the mailing of a first Office Action after the filing of an RCE,

**and thus no certification and/or fee is required.**

- 1b. ☐ This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

(1) ☐ the certification of paragraph 2 below is provided, **or**

(2) ☐ the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

- 1c. ☐ This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

**the certification of paragraph 2 below is provided, and**

**the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.**

2. It is hereby certified

a. ☐ that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or

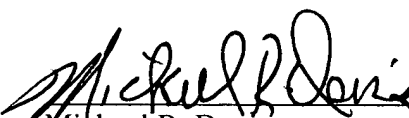
b. ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.

3. ☐ Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.

4. For each non-English language reference listed on the attached form PTO-1449, reference is made to:
- a. ☐ a full or partial English language translation submitted herewith,
  - b. ☒ foreign patent office search reports (International Search Report and European Search Report) (in the English language) of record in the prior parent application,
  - c. ☐ the concise explanation contained in the specification of the present application at page ,
  - d. ☒ the concise explanation set forth in the English language abstract of record in the prior parent application,
  - e. ☐ the concise explanation set forth below or on a separate sheet attached to the reference:
5. ☒ Foreign patent office search reports (International Search Report and European Search Report) citing one or more of the references are of record in the prior parent application.

Respectfully submitted,

Kazumi MATSUSHIGE et al.

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January 20, 2004

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)  
(Use several sheets if necessary)

Date Submitted to PTO: January 20, 2004

ATTY DOCKET NO.  
2004-0076SERIAL NO.  
NEWAPPLICANT  
Kazumi MATSUSHIGE et al.FILING DATE  
January 20, 2004

GROUP

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	5,730,932	3/1998	Sarkhel et al.			
	AB	4,885,841	12/1989	McNabb			
	AC						
	AD						
	AE						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
	AF	99/12689	3/1999	WO				
	AG	0 787 559	8/1997	Europe				
	AH	32 40 540	6/1984	Germany				
	AI	11-10385	1/1999	Japan				
	AJ	10-216630	8/1998	Japan				
	AK	6-7926	1/1994	Japan				
	AL	8-164477	6/1996	Japan				

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	AM	Patent Abstracts of Japan, vol. 1997, no. 02, February 28, 1997 & JP 08 252688 A (Fujitsu Ltd.), October 1, 1996.
	AN	Patent Abstracts of Japan, vol. 013, no. 230 (E-764), May 26, 1989 & JP 01 037077 A (Hitachi Ltd.), February 7, 1989.
	AO	Patent Abstracts of Japan, vol. 005, no. 002 (M-049), January 9, 1981 & JP 55 136562 A (Hitachi Ltd.), October 24, 1980.
	AP	Patent Abstracts of Japan, vol. 1998, no. 04, March 31, 1998 & JP 09 327791 A (Uchihashi Estec Co., Ltd.), December 22, 1997.

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of form with next communication to applicant.

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*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	6,171,415	1/2001	Statnikov, Efim S.			
	AB	6,271,601	8/2001	Yamamoto et al.			
	AC	5,511,719	4/1996	Miyake et al.			
	AD	5,492,263	2/1996	Webster et al.			
	AE	6,319,461	11/2001	Domi et al.			
	AF	2002/0056741	5/2002	Shieh et al.			
	AG	2002/0031903	3/2002	Yamauchi et al.			
	AH						
	AI						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
	AJ	1195217	4/2002	Europe				
	AK	02000351065	12/2000	Japan				
	AL	02001230272	8/2001	Japan				
	AM	00/76708	12/2000	WO				
	AN							

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	AO	
	AP	
	AQ	

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